LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNA."

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R. O. COWLING, A. M., M. D., and L. P. YANDELL, M. D.
EDITORS.

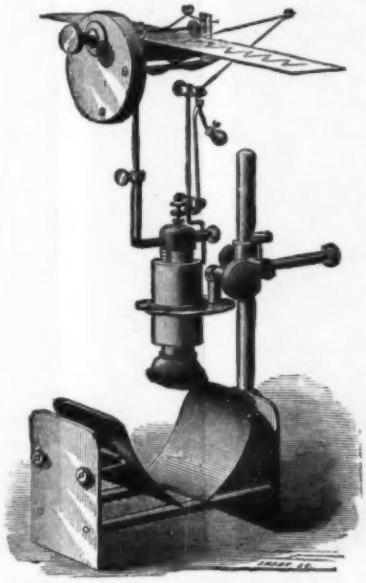
DR. W. H. GARDNER.

In the death of Dr. W. H. Gardner, which occurred in Hart County of this state on the 26th of April, a very extraordinary man was lost. Although his practice was chiefly remote from great towns, Dr. Gardner was one of the best practical surgeons the state has produced, and secured and maintained a large practice in this department of medicine. Those who knew him speak of his many excellent qualities as a man. He was bold and determined, and although somewhat eccentric in his manner, was a very kind-hearted gentleman. The medical society of Hart County passed resolutions of sorrow at his death, and Dr. C. J. Walton pronounced a very fitting eulogy on his life and character. Dr. Gardner was born in 1813 in the county in which he died. He was graduated in the first class of the medical department of the University of Louisville, at that time known as the Medical Institute. Dr. Gardner is credited with having performed thirty-two lithotomies with but a single death, a degree of success surpassed only by Ephraim McDowell, who performed the same number without a loss. In his first operation having made the lateral incision he was obliged to complete his work by the supra-pubic incision, and extracted a calculus of unusual dimensions, which is now in Prof. Gross's collection.

Dr. Gardner was made of much the same sort of stuff that entered into McDowell and Brashear, and no doubt had he entered upon his career in their times, would have done his share in originating the triumphs of surgery. In his own day he repeated many of its victories.

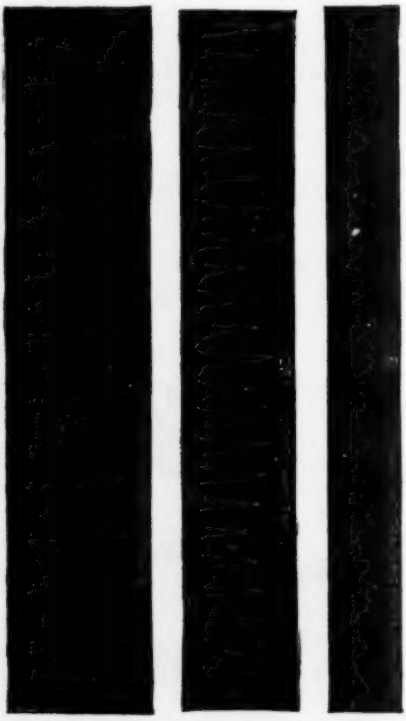
POND'S IMPROVED SPHYGMOGRAPH OR PULSE-WRITER.

We give below a cut and some tracings of this charming instrument, which is made by the Pond Manufacturing Company, Rutland, Vt. We believe it will become a great favorite with the profession. It is a light pocket-



instrument, and is best applied by nicely-regulated pressure while held in the operator's hand. Recently a young lady to whom the application of the sphygmograph was suggested showed such excessive opposition to its use as to greatly surprise her physician. In explanation she stated that she

had been made so nervous once by the adjustment of a Marey's instrument, which required nearly a half hour, that the mere suggestion of "sphygmograph" filled her with aversion. The ease and promptness with which the Pond's sphygmograph made its tracing, with no preliminary manipulation, surprised and delighted her. It is managed with so little trouble, and gives such satisfactory reports of the pulse, frequency and rhythm, of the elasticity of arteries, and the volume of the blood as to stand far ahead of any pulse-writer we have seen. When the operator is familiar with it and has once adjusted it, having previously smoked the mica slips, the taking of a tracing is done



as quickly as the usual feeling of a pulse. It gives an account of the condition of things vividly and minutely. Used with discretion, making allowance for such variations as are due to fasting or feeding, to rest or fatigue, it will be of real value to the diagnostician who would turn upon his case every ray of light that exact physical methods afford.

THE election of Dr. Sayre to the presidency of the American Medical Association will no doubt be received with pleasure by the profession of the country. Dr. Sayre has been so devoted to the fortunes of the Association that a meeting without his presence would have seemed like no meeting at all. The election of Dr. Sayre was, too, a very fitting compliment to the surgery of the nation, which without Dr. Sayre would have a noticeable hiatus. "By the grace of God," said Dr. Gross, quoting St. Paul, "I am what I am." Dr. Sayre may be a trifle too enthusiastic, and his surgical assertions may be a shade too dogmatic, but Dr. Sayre is what he is, and we are of the opinion that it is an excellent is. We need have no fears that all sides will not be presented and a proper balance struck between traumatic and strumous hip-diseases, and that short femurs will prevail even though the new president says they shall not. So also may we know that mild manners shall not perish from the earth.

For what he has done in surgery we hail Dr. Sayre, and for what he has written too. It may not abound in that pathology with which the metropolitan critic delights to revel, but it has straightened many a back and set many a leg afoot, and makes excellent reading for us fellows in the country. Our hat is off to President Sayre.

THE CHEAPER SALTS AND ALKALOIDS OF THE CINCHONA BARKS.—Quinia stands at the head of antiperiodics, and this position it will continue to hold; for, although exceedingly unpleasant in its effects on many persons, its effects are far less disagreeable than those of the other salts. Its expensiveness is its great objection. That any of the other salts of bark can ever supersede it is just as improbable as that the cheaper brands of flour and the cheaper varieties of coffee will ever supersede the more excellent brands of these important articles. We have given the cheaper alkaloids and salts a long and faithful trial, and have been familiar

with the sulphate of cinchona in dispensary practice for a score of years, and have taken frequent occasion to commend these substitutes for quinia to country practitioners, who have to give away much medicine, and for use in charitable institutions. They have to be given in somewhat larger doses than quinia, and, as before remarked, are more disagreeable and more likely to derange the stomach. The cinchona *alkaloid* is tasteless when first taken into the mouth, but a sense of bitterness is observed shortly after it has been administered.

The alkaloids containing no water of crystallization are one third to one half stronger than the salts. Theoretically they are not so readily absorbed by the stomach, but we have not observed this to be the case. Messrs. Powers & Weightman give the whole gist of this matter in the following remarks, which are quoted from one of their circulars: "The merits of sulphate of quinia are unquestioned, but the cheaper alkaloids nearly approach it in usefulness," and "they have prevented a great increase in the cost of quinia in the time of scarcity of the latter."

DEXTRO-QUININE.—This substance, manufactured by Keasbey & Mattison, of Philadelphia, is, we are quite inclined to believe, the best substitute for the sulphate of quinia yet offered to the profession. We have given it an extensive trial during the last month. It does not produce the ringing in the ears nor the deafness which render sulphate of quinia so objectionable. It is given in the same doses as the sulphate of quinia, and seems equally efficacious.

ASCLEPIAS SYRIACA.—Some months ago Dr. Pusey, of Garnettsville, called attention to this plant as a remedy of extraordinary value in dropsy, and Drs. Cleaver, Thomas, and others have also testified in the NEWS to its usefulness. Dr. Vincent Davis, of this city, has prepared a fluid extract from roots of the plant furnished by Dr. Pusey.

FLUID COSMOLINE.—Fluid cosmoline prepared by E. F. Houghton & Co., of Philadelphia, is a most valuable addition to the pharmacopœia. Cosmoline possesses all the good qualities of the cerates and other oleaginous materials employed in medicine and surgery, and is free from objections. Rancidity, the great drawback to the other substances, can not occur in this. Eventually it will supersede entirely lard and its congeners.

"IS SYPHILIS EVER CURABLE?"—Such is the caption of an article in an exchange. The correct answer is, It depends on the treatment chiefly. The younger the patient the more likely is recovery. Children and women are relieved with greater facility than are men. Certainly syphilis *is* curable.

MESSRS. PARKE, DAVIS & CO.—The University Dispensary, Louisville, acknowledges through the NEWS the receipt from this firm of a large lot of their valuable preparations. The medicines are excellent in their effects, and are rendered as pleasant as it is possible to make physic.

LACTOPEPTINE.—Lactopeptine manufactured by the New York Pharmacal Association is an exceedingly valuable preparation, and no one who gives it a fair trial can fail to be impressed with its usefulness in dyspepsia.

DR. L. P. YANDELL sails for England on the Bothnia May 21st, to be gone during the summer months. Dr. Yandell goes in search of health, but will look after matters medical also.

ST. PAUL ON COLIC.—"Drink no longer water, but use a little wine for thy stomach's ache and thine often infirmities." (I Timothy, chap. v, xxiii verse.) "Stomach's sake" is the common reading, but evidently St. Paul's amanuensis mistook his meaning when writing this letter dictated to Timothy.

Original.

SOME RECOLLECTIONS OF THE VAGARIES OF SCARLET FEVER.

BY PRESTON B. SCOTT, M. D.

With every general practitioner a review of his experience in the observation and treatment of this disease only serves to impress the more deeply his conviction of its capriciousness in its occurrence, its course, and its subjectiveness to treatment. While it has alike with other eruptive diseases its law of pathological life, it is singularly reckless of uniformity, and vagaries mark its history as they do no other. This is notable in its grade, as it oftentimes runs so mild a course as to escape notice, or it will so overwhelmingly destroy as to defy recognition. It plays shuttlecock with medical belief in its law of communication. At one time it will comply with rule of contagion and make havoc of young life, and again will not spread with the nearest contact. It is not a respecter of persons either in regard to station or diathesis. In its course it will even in severe forms so run to recovery as to beguile systems of treatment into the vanity of cure, and then at times of malignant prevalence its mutilating and fatal effects will demoralize medical faith. The school which gives infinitesimally nothing urges a claim to peculiar success in its prevention and cure which has, to say the least, gained some popular repute. Methods of rational treatment gain favor for a time by a run of success, to be dashed by reverse as unaccountable as unexpected.

In the question of prophylaxis the doctor is ever dallied with by the uncertain individual indifference or predisposition to the disease. In one instance, of two children on the attack of one child the other was sent away. At the end of two months the house was renovated and disinfected and bedded and carpeted anew, and the child was returned home. In forty-eight hours he had mild scarlet fever. It is whimsical especially to popular impression. At seasons and under circumstances most favorable for its spread it will so fail of it as to associate as cause and effect this fact and the use of some charm-bag or an indefinite course of belladonna pellets. I could cite a dozen instances of only one case occurring in a household of two or more children. Its occurrence in hotels without spreading, and always with a panic, is notable.

In its diagnosis we sometimes find our reputations at the mercy of its caprice. A short time since I thought I recognized a distinctive case in the premonitory vomiting, the sore throat, the eruption, and the high temperature. I expressed my suspicion, and threw a bombshell into a large boarding-house. Next day the fever was gone, the rash faded, and the throat nearly well. At another time, at a hotel well filled by families, one child of four had the well-defined eruption and fever for three days, but no sore throat. I made a positive announcement, and caused a panic. The other children did not take the disease, though remaining in the same suite of rooms. I was condemned. I waited for the desquamation to save me. In two weeks it was conspicuous.

In its complications it tries diagnostic skill. Recently a child while sojourning in a neighboring city was attended by an eminent physician, who made a diagnosis of diphtheria. Another physician was called and pronounced the case one of scarlet fever. As the case progressed he yielded to the force of the exudate, and agreed to the first opinion. I saw the patient here in the stage of desquamation, and treated its brother for uncomplicated scarlet fever. In my first experience with this disease I treated three children of a family at the same time: one with diphtheria, destroyed by the exudation; one a well-marked case of scarlet fever with very little throat trouble and with distinct rash; and an infant with mild eruption and angina. While here and there it likes a shining mark, and lays its deathful or mutilating hand on a favorite form in some happy group, again it sweeps away every prop of parental love. In one instance two only children were taken by a malignant type in the same week. In another, illustrating family predisposition, one child had it severely twice and another three times. One case has been reported to me of two children becoming the victims of one epidemic. Two more were reared to fall a prey to another. Upon the Masonic Home it fell with a single blow in 1868, its healthiest and most beloved child dying of the sthenic form after a short illness. No other case occurred. In 1877, under the service of Dr. Chilton, another case, with recovery, occurred, but no spread.

Less fortunate was the Episcopal Orphan Asylum. In the epidemic of 1874–5, under the services of Dr. Orendorf and myself, it invaded this institution in a malignant form.

Out of forty-two inmates thirty-six had the disease, twenty-four in a severe degree, all within two weeks. There were three deaths; one, a delicate girl, from the asthenic type without the eruption, and with continued vomiting; another, a strumous child, from extensive primary cervical lymph-adenitis; and the third from the intensity of the pyrexia on the fourth day, the temperature reaching 108° F. In eighteen of the cases including the last, the antipyrectic treatment by cold packing was used. They were favorable for this trial, being of the sthenic type, with prompt and well-developed eruption, and a temperature ranging from 104° to 107°. In no instance was the efflorescence driven in. Of these three cases had slight rheumatism, one slight abscess of the neck, one mild nephritis and dropsy. Beyond this the recoveries were complete without sequelæ in these and the milder cases.

It is not strange there should be such public dread of this disease. It is ever the impending sword, and the mine at the feet of the family. In his dealing with it the physician must be ever alert, wary of opinion, and in his treatment cautious and elective. Forearmed and ever armed he must subject each case to his nerve and judgment, for no specific course, no routine measures, no favorite prescription or pet theories will stand him here.

LOUISVILLE.

Books and Pamphlets.

DISEASES OF THE LIVER. Frerichs. Wood's Library of Standard Medical Authors, Vols. II and III.

INHALATIONS IN THE TREATMENT OF PULMONARY DISEASES. By F. H. Davis, M. D., Chicago, Ills. Reprint from Detroit Lancet. Geo. S. Davis, publisher, Detroit, Mich.

OSTEOTOMY FOR DEFORMITIES OF THE LEGS. By Chas. T. Poore, M. D. Reprint from New York Medical Record, April 26, 1879.

URETHRISMUS OR CHRONIC SPASMODIC STRICTURE. By F. N. Otis, M. D., Clinical Professor of Genito-urinary Diseases, College of Physicians and Surgeons, New York, etc. Reprint from Hospital Gazette, 1879.

MEMORIAL ADDRESS ON THE LIFE, CHARACTER, AND DEATH OF DR. JOHN L. COOK, OF HENDERSON. By J. W. Singleton, M. D., of Paducah, Ky. Reprint from American Practitioner. Indianapolis: Journal Company print.

A CONTRIBUTION TO THE HÆMATINIC PROPERTIES OF DIALYSED IRON. By Robert Amory, M. D., Longwood, Mass. Reprint from the Boston Medical and Surgical Journal, 1879. Riverside Press.

CIRCULARS OF INFORMATION OF BUREAU OF EDUCATION. No. 1, 1879: Training School for Nurses. Washington: Government Printing Office. 1879.

NERVOUS DEBILITY AND ITS TREATMENT, WITH A SERIES OF CASES. By Robert H. Porter, M. D., Louisville. Jno. P. Morton & Co., publishers. Pamphlet.

The Louisville Medical News.

Back numbers of the LOUISVILLE MEDICAL NEWS, with several exceptions, can be supplied. The price is six cents per copy, postpaid. Persons wishing to complete their files of the NEWS would do well to order missing numbers early, as but few copies remain of several of the issues.

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Miscellany.

SKETCH OF DR. J. LAWRENCE SMITH.—The following sketch of Dr. Smith, of Louisville, lately elected a corresponding member of the National Academy of Science of France, is extracted from Popular Science Monthly:

J. Lawrence Smith was born December 16, 1818, near Charleston, South Carolina. His father, Benjamin Smith, was a Virginian, who had removed to South Carolina. The subject of this brief memoir received a classical education in the Charleston College, after which he was sent to the University of Virginia. At this institution he enjoyed facilities for the indulgence of his taste in the acquisition of knowledge in that department for which he had in early life shown a decided predilection—pure mathematics. In the later part of his academic career he devoted himself to the higher branches of physics, mixed mathematics, and chemistry, pursuing the latter somewhat in the form of a recreation.

In determining a practical pursuit in life, young Smith selected civil-engineering as a profession; and after devoting two years to the study of its various branches, in connection with geology and mining engineering, he was employed as one of the assistant engineers upon the railroad projected at that time between Charleston and Cincinnati. This pursuit not proving congenial with his scientific tastes, he turned to the study of

medicine, the college of the city of Charleston at that time possessing a corps of eminent medical teachers. After studying medicine three years, Dr. Smith was graduated by the Medical College of South Carolina, after which he went to Europe, where he devoted three more years to the study of medicine. But during all this time he continued his devotion to those departments which first commanded his scientific affections. He studied physiology under Flourens and Longet; chemistry under Orfila, Dumas, and Liebig; physics under Pouillet, Desprez, and Becquerel; mineralogy and geology under Elie de Beaumont and Dufrenoy.

Dr. Smith returned to America in 1844, having already begun to earn a reputation in original scientific researches, principally in connection with the fatty bodies. His paper on Spermaceti, in 1842, at once stamped his character as an experimental inquirer.

On his return to Charleston, Dr. Smith commenced the practice of medicine, and there delivered a course of lectures on toxicology. But the state of South Carolina, needing his services as assayer of the bullion that came into commerce from the gold-fields of Georgia, North and South Carolina, appointed him to that duty. At the same time he gave a great deal of attention to agricultural chemistry, for which he had acquired a great fondness in Liebig's laboratory, and to this were added researches in geology and mineralogy. Among the attractive features of the agricultural chemistry of his native state that early drew the attention of Dr. Smith were the unrivaled marls on which the city of Charleston stands. These beds of fertilizers are from one hundred and ten to three hundred and ten feet deep, and are on what geologists call the tertiary formation. They extend back more than one hundred miles from Charleston. Dr. Smith was one of the first to ascertain the scientific character of this immense agricultural wealth. His paper on this subject, with the correspondence of Professor Bailey, the great microscopist of the Military Academy of West Point, is one of much interest. He also pointed out the large amount of phosphate of lime in these marls, from which there are now obtained immense quantities of phosphatic nodules.

During these scientific labors Prof. Smith made a valuable and thorough investigation into the meteorological conditions, character of soils, and culture affecting the growth of cotton. The report on this subject was so valuable that in 1856 President Buchanan appointed Prof. Smith, in response to a request of the Sultan of Turkey, to teach the Turkish agriculturists the proper method for successful management of cotton-culture in Asia Minor. Upon arriving in Turkey Prof. Smith was chagrined to find that an associate in the commission had induced the Turkish government to undertake the culture of cotton near Constantinople. Prof. Smith was unwilling to associate his name with an enterprise which he felt satisfied would be a failure, and the event fully justified his judgment. Prof. Smith was upon the eve of returning to America, when the Turkish government tendered him an independent appointment, that of mining engineer, with most liberal provisions. This position he filled during four years, and he performed his duties with such signal success that the Turkish government heaped upon him the decorations of the empire and very costly presents. The results of Prof. Smith's labors are a permanent advantage to the empire, and it has received ever since 1856, and continues to receive, large revenues from his discoveries of emery, chrome, ores, and coals within the domain of Turkey. His papers on these subjects, read before learned societies, and published in the principal scientific journals of Europe and America, gave him a high position among scientific men. His labors in Asia Minor upon the subject of emery, which he was the first to discover there, led to its discovery in America, and in Massachusetts and North Carolina a large industrial product of emery is now carried on. In the scientific journals of this country the papers upon emery and corundum recognize the successful researches of Prof. Smith as having done almost every thing for these commercial enterprises. These discoveries of emery in Asia Minor destroyed the rapacious monopoly of the article at Naxos, in the Grecian Archipelago, increased the amount of emery used five or six fold, with a corresponding reduction in price. In many of the arts of life the free use of emery or corundum has become a necessity, but this free use of these articles would have been greatly retarded without a very material reduction in price.

While in the employment of the Sultan of Turkey Prof. Smith investigated a great variety of Turkish resources besides those directly within the purview of his appointment as mining engineer. His paper on the Thermal Waters of Asia Minor is one of extreme interest and great scientific value.

In 1851 Prof. Smith invented the inverted microscope, an important improvement; for while it may do the work of any other microscope, there are very interesting fields of research which can be cultivated by no other instrument. Dr. Carpenter, in his work on Physiology, bears strong testimony to its value.

After Prof. Smith's return from Turkey his *Alma Mater*, the University of Virginia, elected him professor of chemistry; and while discharging the duties of that chair he, in connection with his able assistant—George J. Brush, at present one of the chief professors in the Sheffield School of Science—performed a much-needed work in revising the Chemistry of American Minerals. A full account of these labors was given in the American Journal of Science, and subsequently in a valuable and interesting work containing the scientific researches of Prof. Smith, recently published by Jno. P. Morton & Co. in the city of Louisville.

After marrying, in Louisville, the daughter of the Hon. James Guthrie, Prof. Smith adopted that city as his home. He was elected, soon after settling in Louisville, to the chair of Chemistry in the Medical Department of the University of Louisville, a position which he held for a number of years. After resigning that chair he took scientific charge of the gas-works of Louisville. He has a private laboratory, where he spends several hours each day, and continues his devotion to original research.

Prof. Smith was one of the commissioners to the Paris Exposition of 1867, and made an able report on the Progress and Condition of Several Departments of Industrial Chemistry. It is very nearly exhaustive of the important subjects to which it is devoted. Prof. Smith was again appointed commissioner to Vienna in 1873, and discharged his duties with his usual ability.

Prof. Smith's important original researches are no less than fifty in number, and his scientific reports are numerous, showing great activity and perseverance in cultivating the field he has chosen. Among the honors he has received is the highest that American science can confer, the presidency of the American Association for the Advancement of Science, to which he was elected in the year 1872.

American Pork.—Such a large quantity of American pork is now imported into this country and sold at such low prices, that consumers will do wisely to exercise some care in thoroughly cooking the article in order to counteract the possible danger of trichinæ. The results of recent experiments by two qualified microscopists on pork sent to the Chicago market show that about eight per cent of the pigs may be considered to be infected with the disease, the number of worms varying from thirty-five thousand to thirteen thousand to the cubic inch of muscle. One of the experts—Dr. Belfield—is convinced of the innocuousness of small numbers of the worms, and experimented *in corpore vili*, himself swallowing twelve live trichinæ. We are glad to learn that this enthusiastic gentleman "has not experienced an unpleasant symptom to date." As regards the relative value of the different substances used for the destruction of the worm, it was found, after several trials, that the most efficacious agent was sulphurous acid. A very little acid mixed with the brine in which the pork is preserved or pickled was sufficient to kill all the trichinæ without damaging the pork.—*London Lancet.*

The Winter of 1878–79.—R. A. Proctor, comparing the cold of the past few months with previous winters states: "The winter of 1878–79 must be regarded as the coldest we have had during at least the last score of years, and probably during twice that time. It was not characterized by exceptionally severe short periods of intense cold, like those which occurred during the winters of 1854–55, 1855–56, and 1860–61, but it has been surpassed by few winters during the last two centuries for constant low temperature and long-continued moderate frost. During the last ninety years there have been only four winters matching that of 1878–79 in these respects."—*Med. Times and Gazette.*

Russian.—We hear that among the persons who have fallen under the displeasure of the authorities at St. Petersburg is Dr. Ivan Tourguenieff, the popular author and professor in the university. It appears that the police were offended with him because the students gave him an ovation, and he was ordered to leave the country. M. Ivan Tourguenieff is a naturalized Frenchman. Strange to say, it was he who in one of his works coined the term "Nihilist" to characterize the revolutionary sect in Russia. The word has unfortunately become during the last few days one of terrible significance in that unhappy country.—*Medical Press and Circular.*

IS ST. LOUIS TO HAVE AN EPIDEMIC OF YELLOW FEVER?—From St. Louis Courier of Medicine:

Let us not be called alarmists if we direct the attention of our board of health and city authorities to a fact which may prove of vital importance to the health of our city during the approaching summer, and which may also affect seriously the business interests of this community. We refer to the danger that may result from the large influx of blacks that are now coming from the South, many passing through the city to Kansas and more interior regions, but many remaining here, either from choice or want of means to continue their journey. They come mostly from regions that last summer were devastated by the yellow fever, and they bring with them their household goods, bedding, clothing, etc. Now it is well known that during and after the epidemic of yellow fever the infected clothing and bedding were not burned, but in most cases merely thrown out to be greedily appropriated by the lower class of the negro population, the very class which constitutes the majority of the present emigration.

The vitality of the yellow-fever germ has been proven to be very great; and it persists for an indefinite period, especially in woolen stuffs, even after it has been subjected to a degree of cold that formerly was considered sufficient to destroy it. A case of yellow fever occurring in one of the small lower river towns, in the middle of January last, fully illustrates this: A little girl contracted the disease (and communicated it to others) from playing on the carpet taken from the room in which a fatal case of yellow fever had occurred five months previously. The carpet had been thoroughly aired and exposed to the extreme weather of early winter, and yet the materies morbi was in it.

It is a fact, too, of frequent observation, that contagious effluvia are carried long distances by fomites. The recent terrible outbreak of malignant fever prevalent in Russia was brought from Turkey through the medium of a soldier's blanket.

The confidence that is felt in the immunity of this city from the danger of the spreading of yellow fever has been rudely and positively dispelled by the experience of last summer; and though at that time it did not extend and become epidemic, yet there were cases that did originate both in the city hospital and quarantine, and there were deaths from it at the latter. It were folly to entertain the belief that our elevation above the sea, that our northern latitude, that our complete drainage or perfect hygienic surroundings are all such as to render it utterly impossible that the fever could find congenial soil in our city, until we were stricken and overwhelmed by the dread scourge.

There are portions of our city that in all conscience' sake are filthy enough to act as hot-beds if once the seed were planted; and it is in just those sections that these poverty-stricken and infected colored people will find lodgment.

The lower river towns are expecting this summer a recurrence of the epidemic of last season, and are preparing as far as possible for it. Let us too be wise, and now at once apply the ounce of preventive, for the time may come when even the pound may not be efficacious for the cure.

NATIONAL BOARD OF HEALTH.—Prof. J. L. Cabell, Virginia; Dr. S. M. Bemiss, Louisiana; Dr. Homer A. Johnson, Illinois; Dr. Henry I. Bowditch, Massachusetts; Dr. Stephen Smith, New York; Dr. Tullio J. Verdi, Washington; Dr. R. W. Mitchell, Tennessee; Surgeon John S. Billings, U. S. Army; Medical Director T. J. Turner, U. S. Navy; Surgeon P. H. Bailhache, U. S. Marine Hospital Service, and Solicitor-general S. T. Phillips. The first meeting of the board was held in Washington, April 2d, and organized as follows: President, J. L. Cabell; vice-president, J. S. Billings; secretary, T. J. Turner. The president, vice-president, secretary, Surgeon P. H. Bailhache, and Dr. Stephen Smith were appointed an executive committee.

RAKOCZY.—The following is a *verbatim* and *literatim* extract from the label of the Rakoczy water. The remedy apparently is not very good for unclassical English:

The Ofen mineral bitterwater „Rakoczy" is very successfully used by Mr. Walla, chief physician of St. Rochus and by Mr. Frenrelsz, the Ofen chief-physician: 1) for disorders in the bowels, viz, obstructions of the liver and the milt, hemorrhoids, costiveness, 2) for lasting catarrh of the stomach and the bowels, for the isterical disease, 3) for the stagnations of the blood circulation, maladies of respiration, especially if these congestions have an influence upon different organs, 4) for the gout to forward the segregation and the stuffchanging, 5) for lasting pimples and for slight degrees of scropules, 6) for the accumulation of grease at the heart, 7) for all the accumulations of grease in general, 8) for maladies of the organs of the femal sex.

Besides Mr. Seltz, the professor of the Munich university clinics, has found it very eficacious in many cases and confirmed this the 12. April 1875.

COMPETITIVE EXAMINATIONS.—Above all things, let my imaginary pupil have preserved the freshness and vigor of youth in his mind as well as his body. The educational abomination of desolation of the present day is the stimulation of young people to work at high pressure by incessant competitive examinations. Some wise man (who probably was not an early riser) has said of early risers in general that they are conceited all the forenoon and stupid all the afternoon. Now whether this is true of early risers in the common acceptation of the word or not, I will not pretend to say; but it is too often true of the unhappy children who are forced to rise too early in their classes. They are conceited all the forenoon of life, and stupid all its afternoon. The vigor and freshness which should have been stored up for the purposes of the hard struggle for existence in practical life, have been washed out of them by precocious mental debauchery—by book-gluttony and lesson-bibbing. Their faculties are worn out by the strain put upon their callow brains, and they are demoralized by worthless childish triumphs before the real work of life begins. I have no compassion for sloth, but youth has more need for intellectual rest than age; and the cheerfulness, the tenacity of purpose, the power of work which make many a successful man what he is, must often be placed to the credit not to his hours of industry, but to that of his hours of idleness in boyhood. Even the hardest worker of us all, if he has to deal with any thing above mere details, will do well now and again to let his brain lie fallow for a space. The next crop of thought will certainly be all the fuller in the ear and the weeds fewer.—*Prof. Huxley, in Popular Science Monthly.*

CONCERNING THE COLOR OF EYES.—May a portrait-painter be allowed to remark that there are two kinds of green eyes, and the poets have duly appreciated both? The eye of the "green-eyed monster" is no doubt the cold gray or stony blue eye overspread with the yellow of biliousness, hence green; but when Dante called the eyes of the beautiful Beatrice *emeralds* he did not mean to insult her. The image called up by his ecstatic words is that of those deep, soft eyes which are a warm brown in some lights, for instance, with the light falling on them from one side only, and take a gray tint when facing the light of the sky and green tints at other times, according to the lights that fall upon them, and are therefore sometimes a puzzle to portrait-painters. Eyes, like the sea and precious stones, catch lights and transmute them. The sea is only green from the meeting of sunlight and blue skylight in it.—*J. M. H. P. S.*—Has it been remarked that the distinction between yellow and blue tints, the only one made by the color-blind, according to Dr. Pole, is precisely the same as that made by the sun in photography; all the warm tints (as an artist who makes the same distinction would call those partaking of yellow) coming out darker, and all the cold ones, or those partaking of blue, lighter than in the object photographed?—*Nature, February* 13, 1879; *Edinburgh Med. Jour.*

DR. MURCHISON, of London, is dead. Truly a great man has fallen. The Medical Press and Circular says of the sad event: "It is with great regret we record the sudden death of Dr. Murchison. Dr. Murchison, who had been twice a victim to scarlet fever, had suffered somewhat severely from aortic disease of the heart for some six or seven years past, a sequel upon the fever. He often referred to his death in conversation, remarking that his disease was such as to lead him to anticipate that he would one day be driven home lifeless from his daily round of visits. On Wednesday last, after parting with a patient, he stooped to open a lower drawer in his consulting-room, and without any immediate premonitory symptom his heart ceased to act, and within a few minutes he was found dead."

Selections.

On Color-sight and Color-blindness.—J. R. Wolfe, M. D., F. R. C. S. E., in Medical Times and Gazette:

Color-blindness having for the last few years occupied so much of the attention of the literary and scientific world, I wished to ascertain to what extent that defect exists among the rising generation of this community. With this view we formed a commission, consisting of Dr. Cumming, Dr. Pickering, and myself, and with the permission of the school board we visited several schools and examined upward of two thousand children. I propose in this paper to submit the result of our examination to this society.

It is a comparatively recent subject. The first cases of color-blindness were published by Joseph Huddart in the Philosophical Transactions, London, 1777; but the subject excited little interest until the year 1794, when the celebrated English chemist, Dalton, who was red-blind, published an account of his own case, which attracted so much attention, it being considered a rare curiosity, that subsequent writers called the defect Daltonism.

In 1805 that stupendous genius Goethe published a treatise on the pathology of color-sight. In 1837 Prof. Seebeck was the first to examine a number of color-blind persons, and to classify the degrees of their abnormal condition. But the most important work on the subject was that of Dr. George Wilson, Professor of Chemistry in Edinburgh, which first appeared in the Monthly Journal of Medical Science for November, 1853. "My own special attention," says Wilson, "was directed to the subject from the blunders which I found many chemical pupils make in reference to the colors of compounds. After making every allowance for imperfect exposition on my part and insufficient attention on the part of my students, and after also making a large deduction for inaccurate answers on the score of imperfect remembrance and inability to name colors, I still found in the laboratory and lecture-room that many a pupil was puzzled to describe the changes which occur when an acid or an alkali acts on a vegetable coloring matter, although to a normal eye these changes are of the most marked character, and that in general I could count with little confidence on accurate answers to questions regarding the colors of bodies."

A great deal has since been written on the subject both in France and Germany. The most comprehensive treatise on color-blindness appeared recently by Prof. Holmgren, of Upsala, Sweden. It is only just to the Edinburgh professor to say that Holmgren's most striking points are due to Wilson's suggestions. Great credit is due to Dr. Foy Jeffries, of Boston, for his valuable efforts to direct public attention in America to that subject. Dr. Stilling, of Cassel, and Dr. Cohn, of Breslau, have also given us valuable contributions to the study of this subject; and my excellent friend, Dr. Hugo Magnus, of Breslau, has written several brochures which have called forth high eulogiums from Mr. Gladstone, who published a paper on Color-sense of Homer in the October number of the Nineteenth Century in 1877. Mr. Gladstone's paper was mainly instrumental in directing public attention to the subject in this country; the more so that it was at a time of feverish political excitement that England's great statesman and scholar was able to shake off Russ and Bulgarian, and to devote some hours to the study of the Color-sense of the Homeric Period. I propose to speak to you this evening on perception of color in its practical bearing on certain occupations, especially employes on railways and sailors. A few introductory remarks upon the physiology of vision will facilitate the treatment of the subject.

The eye is the organ which brings us into contact with the world around us by giving us an image of objects, of their size, shape, and color. The medium through which this effect is produced is primarily the retina and optic nerve. The retina receives the impression of light and color emanating from objects, which impression is conveyed to the brain by means of the fibers of the optic nerve. This is the organ of vision in its most rudimentary form, as met with in the lowest forms of animal life, consisting of a nervous cord and coloring matter for absorbing the rays of light; but in ascending the scale of animal life we have the visual organ in a degree of perfection and development commensurate with its requirements.

The human eye in its totality may be regarded as a photographic apparatus, consisting of retina to receive the image, optic nerve to conduct the impression, compound lens for refraction, camera, adjusting apparatus, nerves for regulating its movements, and nerves for its nutrition. When we consider that the eye is a self-adjusting apparatus, serving the purposes both of telescope and microscope, and that the retina is a kind of plate which not only receives the impression of objects from without but upon which also are registered the changes that are going on in the brain, heart, kidneys, and other organs, and that its materials are composed of organic substances subject to structural changes, we must admit that, with all its optical imperfections, the eye is an instrument not lightly to be spoken of.

That the retina is a membrane corresponding to the photographer's plate is a statement which I could not have made to you two years ago. All that we then knew of the retina was that it consisted of five layers, and that the outer layer (rods and cones) was the impressible membrane which Heinrich Muller demonstrated in 1847, but by what mechanism we were left to mere conjecture. It is only two years since Prof. Boll, of Rome, published his observations on the photo-chemical action of the retina.

Experiment. Take a frog and keep it in darkness for some time, then decapitate it, and keep the head in a dark place for twenty-four hours; remove the eyeball, open it, and examine the retina, which you will find of a beautiful red color; expose it to the sunlight and the red gradually vanishes, the membrane gets pale, then yellowish, and ultimately becomes like white satin. This red principle of the retina, which is generated in darkness and decomposed in sunlight Boll calls erythropsine. That it exists after the death of the animal shows that it is not a transitory property, but a durable chemical element of the retina, analogous to the hæmoglobin of the stroma of the red corpuscles of the blood.

The erythropsine is transformed by the light into several physiological combinations, the same as hæmoglobin is changed by the action of different gases. The different chemical combinations resulting from the action of light upon the erythropsine—in other words, this photo-chemical process—constitute the essence of the perception of light and color.

There is another factor in this physiological laboratory which we must notice, namely, behind the retina there is a layer of epithelium, covered with pigment cells of hexagonal shape. These cells contain oil globules, which Boll considers to be the primary materials from which the erythropsine is incessantly reproduced. The experiments made by Boll upon frogs and cartilaginous and osseous fishes have been repeated with the same result upon the human subject by Professors Schenke and Zuckerkandel, of Vienna, after a capital execution.

Apropos of the photo-chemical theory, it appears to me to bring us one step nearer to a comprehension of the intimacy which exists between mental operation and physical action. Without losing myself in metaphysics, I would merely indicate that it shows us that the image of objects is actually impressed on the retina, which the mind stores up; memory is the faculty of bringing forth these plates when required. Thus the analogy between the retina and the photographer's plate is strictly correct, only that the retina gives us a chromo-photograph.

Now with regard to the perception of color. Newton has demonstrated that white light, as emitted from the sun or from any luminous body, is composed of seven different kinds of light, viz. red, orange, yellow, green, blue, indigo, and violet. If we admit a beam of the sunlight through a small hole in the

window-shutter of a dark room it will go on in a straight line and form a round white spot on the wall. If we now interpose a prism whose refracting angle is such that this beam of light may fall upon its first surface and emerge at the same angle from its second surface, and if we receive the refracted beam upon a screen instead of a white spot there will be formed upon the screen an oblong image of the sun, containing the seven colors, which is called the solar or prismatic spectrum. These seven colors are called primary colors, because they can not be decomposed; pass one of them through a prism and it will merely be bent, the color still remaining the same. All colors used in the industries are only mixture of different pigments which are decomposed by the prism.

Adopting the undulation theory of light, and looking at the solar spectrum we find the red, which has the longest wave, is the least refrangible color, while violet, which has the shortest wave, is the most refrangible; and green, which has the medium length of wave, occupies the middle of the spectrum or is of medium refrangibility.

Upon this simple view of the subject is founded the theory of perception of color, first propounded by Thomas Young, and lately defended by Helmholtz, which is generally adopted under the name of the Young-Helmholtz theory, which is this, that the retina has three distinct kinds of nervous elements, each of which perceives one of the three fundamental colors, red, green, and violet. The first of these elements is excited in the highest degree by the red rays, but also slightly by the green, and feebly by the violet rays. The second category is impressed by the green rays, and also feebly by the red and violet rays. Thirdly, the violet rays excite strongly the elements of the third category, which are little sensible to the green rays, and in a still less degree to the red. Every one of these elements when excited transmits to the brain the impression of its own fundamental color. The impression of the intermediary colors is given by the excitation of two or three of these groups in different degrees. When all the three are equally excited the result is white or gray color.

A Painless Method of Excising the Whole Tongue.—Richard Barwell, F. R. C. S., in London Lancet:

The method itself is very simple. The instruments required are a small scalpel, one or two Liston's needles, and an écraseur, or better, two écraseurs. When the patient is well under the influence of the anæsthetic place a gag between the jaws, draw the tongue a little forward and pass through the raphe a string, with which the organ is to be simply controlled, not dragged out of the mouth, which must be avoided. An incision about a quarter or a third of an inch long is now made from the hyoid bone forward, and strictly in the middle line. Thus far you will see my operation resembles Nunneley's except that my incision is further back and shorter; but from this point the methods differ, for that surgeon passed by means of a seaton needle the loop of an écraseur chain into the floor of the mouth through the frenum of the tongue, and then dragged the part to be removed forward through the loop; and although he could remove considerable parts by these means he could hardly get at the whole organ, and I think his opening into the mouth too short and direct, nor did he eliminate pain.

By my method, when the raphe of the mylo-hyoid has been divided the knife is laid aside, the genio-hyoid and genio-hyoglossus muscles are separated from their fellows by the handle of the scalpel or by the finger if the surgeon have a small finger-tip, and the root of the tongue is readily reached; but the mouth is not to be opened here. An armed Liston's needle is now placed in the wound and the forefinger of the other hand between the diseased side of the tongue and the jaw as far back as it will go, viz. a little beyond the last molar tooth, and to this point the needle is guided, taking care to keep it rather nearer to the bone than to the side of the tongue; here it pierces the mucous membrane, enters the mouth, and the thread being released is withdrawn, a loop of cord being left behind. The same thing is then done for the other side, except that here a loop in the mouth is unnecessary. The écraseur is now taken in hand; it must have one end of the wire detached and bent into a sort of hook at as sharp an angle as the material will bear. Tie an end of the last-placed thread in the bend of this hook; then by traction on the other end that in the mouth, draw the wire along the track of the needle. When the metal appears in the mouth just beyond the last molar tooth pull the wire gently through till the nozzle of the écraseur is close to the supra-hyoid wound; then detach the thread and pass the wire hook into the loop of twine that enters the mouth on the diseased side of the tongue, and by gentle traction draw the metal from thus far back in the mouth out at the hyoid wound and attach it to the body of the instrument. Before screwing the wire tight pass a finger along the dorsum of the tongue and ascertain its exact position. I am not afraid of its lying too far forward; it might easily without care sit too far back, also it might slip away from the desired place as the screw is used; therefore having fixed the exact line along which the tongue is to be severed, I place my finger where that line intersects the raphe on the dorsum of the tongue; to it I pass the Liston's needle, letting its point project a line or two, and taking care that the wire lies behind it; by this means the écraseur can be guided exactly along the required plane. When the base of the tongue has been cut through and the wire has come out at the wound, the loop of the same or of another écraseur is passed over the tip of the tongue into the line of incision, and the tissues, small in quantity but very vascular, which attach the tongue to the floor of the mouth, slowly cut through, when the whole organ is severed and is removed from between the lips.

The Therapeutic Value of Rest in the Treatment of Disease.—Arthur E. T. Longhurst, M. D., in London Lancet:

In speaking of the advantages of rest in the treatment of disease I desire to use the word in its most comprehensive sense, and in considering the principal diseases and affections of any of the great systems of the body we can not fail to see the importance of rest for the work that nature has to do, both in repelling the attacks of disease and in completing the work of repair. In affections of the brain and nervous system, whether as the result of injury or disease alone, or of both causes combined, is there any single agent of treatment so valuable as rest? Take, for instance, perhaps the slightest of cerebral affections, "concussion." What a lengthened rest of mind and body is very often necessary to recovery or for the prevention of serious disease. In "compression" due to fluid extravasation, of what vital

moment is rest. Equally in affections of the membranes or substance of the brain, or in that state of arterial tension and inequality due to fibroid or other degenerative change in the blood-vessels, which is too often the forerunner of apoplexy, rest is our first consideration. Again, in conditions of extreme nervous exhaustion, as in the overwrought brain or in delirium tremens, of what value is rest! when even opiates sometimes fail to induce that most perfect state of rest, sleep, and we obtain it by placing the sufferer as far as possible in a condition of mental and bodily quiet, and by giving milk and other easily assimilated nourishment, with or without chloral and bromides. In affections of the spinal cord and its membranes, how often has a lengthened rest in the horizontal posture been followed by recovery.

In affections of the circulatory system we have an example of a twofold character. The heart itself, obtaining no lengthened period of repose, is less amenable to treatment, even of the nature here advocated. The blood-vessels, on the contrary, are most favorably influenced by certain postures in which they obtain rest, and disease is modified accordingly, as shown in the recumbent treatment of aneurism of the aorta, or in the complete rest given to the sac which follows the surgeon's ligature of the small vessels.

In the respiratory system the importance of the principle of rest is seen in the need of quiet, in the absence of conversation, and in the use of nervine sedatives in irritable states of the respiratory tract of the medulla, as in spasmodic asthma, hooping-cough, etc. Affections of the digestive and urinary systems also are very markedly influenced by certain conditions and treatment which give rest to the troubled viscera, notably certain states of the stomach in which vomiting is a distressing and urgent symptom. Yet how sensibly and often speedily is it relieved by withholding all ingesta for a time, and by covering the epigastrium with a warm soothing poultice or an application of belladonna, or other sedative acting on the ganglionic nervous centers. The liver, overstimulated by dietic excess or indiscretion, loses its proper rest and becomes disorganized, unless by a change in the mode of life rest can be secured for it. The kidney, too, if its functions are disturbed by the abuse of alcoholic drinks, entailing an unnatural and continued strain on its organism, alike suffers from loss of rest, undergoing permanent degeneration and decay.

In affections of the serous membranes, especially in acute inflammations of their structure, how important an agent is rest! And if in pericarditis we can moderate the heart's action, or in pleurisy diminish the frequency of respiration by the employment of sedatives, thus giving a measure of rest to the inflamed and sensitive membrane, we shall doubtless aid nature in her effort and lessen the probabilities of damage to the structures involved.

I have said that I desire to use the word rest in its most comprehensive sense, and the following mention of some of the varieties of rest attainable in the treatment of disease will give expression to my meaning: 1. Mental rest. 2. Bodily rest. 3. A combination of the above, as in that most perfect state of rest which we call "sleep." 4. Organic rest, as evidenced in the avoidance of exertion in cardiac disease; of talking in affections of the respiratory tract; and in limiting so far as possible the act of deglutition in affections of the alimentary tract by the substitution of enemata. 5. Local rest, as secured by change in the position of body or limb, the use of pillows, cushions, etc. 6. Dietic rest, by avoiding the too frequent use of food and drink. 7. Medicinal rest, in the relief of spasm by inhalations, and the not too frequent administration of medicines to the prejudice of nutrients or stimulants. By a consideration then of the question as to the manner in which the principles of rest above indicated may be best applied in each special case of disease, we shall no doubt conduce very materially to the relief and comfort of the sufferer, as well as to the arrest of diseased action.

The Female Generative Organs in their Medico-legal Relations.—Extract from transactions of the Obstetrical Society of Cincinnati, in the American Journal of Obstetrics:

Dr. Reamy said: "The causes of labor are not known. Two hundred and seventy-six days from the day of insemination labor usually occurs. Why no man knows. I will not detain the society with citation of authors as to opinions familiar to all. I have known cases occurring in my own practice where from the circumstances attending them there could be no reasonable doubt as to the time of insemination the date of labor being postponed from ten to sixteen days; in one case twenty-two days, gestation lasting two hundred and ninety-eight days. I have when a boy marked the time of gestation in the mare, and known it to extend thirty to thirty-six days beyond the ordinary period, agreeing with the well-known cases reported by English breeders. I dismiss the subject therefore by saying that I do not believe a medical witness ought to testify, in a case where a woman's virtue is called in question, that a gestation may not be protracted to three hundred or even to three hundred and fifteen days.

"As to the subject of superfetation, which is considered in the essay, I may state that there is to my mind no physiological or other reason why it may not occur. As a rule, ovulation ceases when pregnancy occurs, but there are exceptions to this rule. There is no mechanical barrier to a second conception occurring in the earlier months of gestation. In my own practice I had a case where ten and one half days intervened between the births of twins."

Dr. Temple, referring to the subject of early viability, related a case of which he was personally cognizant—that of a clergyman, whose wife gave birth to a viable child six months and twelve days after marriage. A church trial resulted in his acquittal. An appeal was made from the decision, and in the highest tribunal of the church, after an exhaustive examination and learned discussion of the subject, the original decision was sustained.

Dr. C. O. Wright said that in regard to the earliest age in which a woman may give birth to a child, he would say that during his stay in Siam he had seen a mother at ten years of age and a grandmother at twenty-one; and was informed that cases occurred there, or at least one was positive, where the mother had not reached her tenth year. In that hot climate women are developed very young, and from his personal observation he could state that it was no unusual thing in Siam, as well as in southern China, to to find fully-developed women at eight years. The oldest age at which he had known a woman to bear a child was forty-eight years.

A case in which there was destruction of the third left frontal convolution without aphasia is recorded in the British Medical Journal of March 15th.